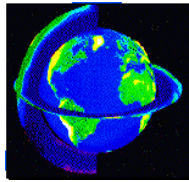


**Aerospace
Technology**



Earth Science



Space Science



**Human
Exploration**



**Biological &
Physical Research**

***“Enhance mission success through seamless, community-focused
electronic service delivery”***

Leadership....Governance.....Competencies.....Technology Management

Communities

**Partners
& Suppliers**

*Industry
Universities
International
Government
Educators*

**Virtual
Teams**

*Programs
Projects
Working Groups
Communities of
Practice, Interest*

Employees

*Corporate
Management
Staff*

Public

*General Public
Media
Educators
Space
Enthusiasts
Students*

Enabling Services and Technologies

**IFM, ODIN, eCommerce, eLearning, Knowledge Mgmt, Collaboration,
Web Services, IT Infrastructure**

Why eNASA?

- Enhance key mission, program, and project activities by providing revolutionary tools and services to solve critical problems
- Transform the way we work by enabling collaboration within and beyond NASA regardless of time, distance, or technology
- Enable the Agency to conduct its business more efficiently and effectively
- Leverage our workforce and other corporate resources by minimizing the duplication of efforts for shared/common services & capabilities
- Increase employee productivity by providing user-centric access to information delivery and applications, foster person-to-person communication, and increase awareness of NASA significant events
- Actively engage the public, partners, suppliers, and stakeholders in accomplishing and promoting the NASA mission

***“Enhance mission success through seamless, community-focused
electronic service delivery”***

Leadership....Governance.....Competencies.....Technology Management

Near Term: Deliver Prioritized Suite of Value-Add Services

- Portal and Web Services
- Collaboration and Workgroup Services
- Document Management Services
- Data and Video Services
- Knowledge Capture Services

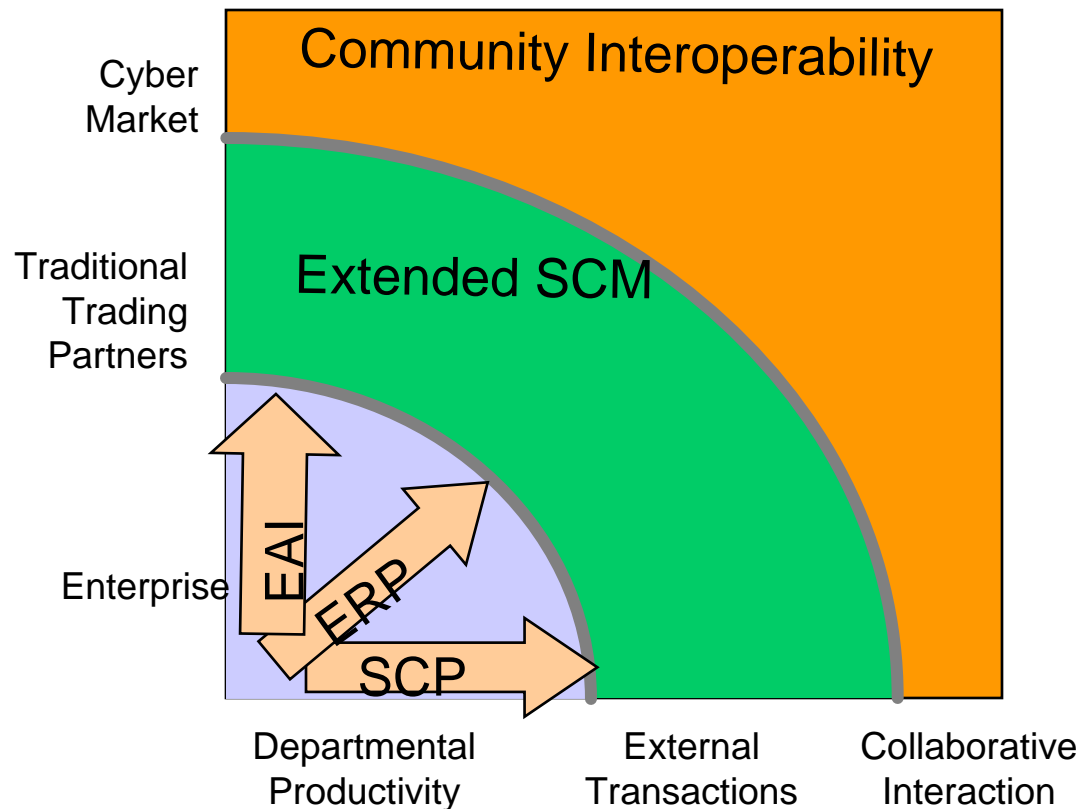
Longer Term: Enable Agency Rollout of Products and Services

- Facilitate infrastructure that provides basic technical performance level
- Assure vertical integration to improve end-to-end process efficiency, quality of service, safety and security
- Increase incentives for improving customer focus and satisfaction

Enabling Services and Technologies

**IFM, ODIN, eCommerce, eLearning, Knowledge Mgmt, Collaboration,
Web Services, IT Infrastructure**

Supply Chain Management and Collaborative Commerce



Collaborative Commerce

- Enables interactions among personnel, partners & customers in a trading community
- End-to-end process including planning, design, procurement, logistics, asset management

- *Projected \$2.7T market by 2004 (\$33B for Aerospace)
- *Shift from competition between companies to nonlinear supplier chains
- *Shift from transaction focus to collaboration interaction
- *Information sharing is critical for competitive advantage
- *Lots of market hype and shake out: success measured by improvement to forecasting and product development

SCM and Aerospace & Defense Industry

Exostar exchange

Partners: Boeing, Lockheed Martin, Raytheon & BAE

Scope: \$400B industry

Open to commercial, civil & military

MyAircraft exchange

Partners: Honeywell/GE, UT, BF Goodrich and 10 Airlines

Scope: Focus on aircraft parts and maintenance market

Experience to Date

- * Operational < 6 months
- * Drive for B2B/SCM coming from CEOs
- * Goal to improve access to buy & sell markets - not expecting cost savings
- * OEMs more confident, suppliers more anxious
- * Non-primes are optimistic about access to new customers
- * European companies slow to enter

NASA

- * NASA primes are predominant users of SCM technologies and exchanges
- * eNASA strategy and pilots are underway to define roadmap and requirements
- * IFM vendor capabilities may be leveraged

“Enhance mission success through seamless, community-focused electronic service delivery”

Partners & Suppliers	Virtual Teams	Employees	Public
<i>Industry Universities International Government Educators</i>	<i>Programs Projects Working Groups Communities of Practice, Interest</i>	<i>Corporate Management Staff</i>	<i>General Public Media Educators Space Enthusiasts Students</i>
Collaborative Commerce <ul style="list-style-type: none"> • NAIS...FedBizOpps • Supply Chain Mgmt • Electronic Mktplaces • On-Line Auctions • Federal Commons PI Start-Up Kit International Portal	Team Start-Up Kit <ul style="list-style-type: none"> • Virtual PM Tools • Collaborative Tools <ul style="list-style-type: none"> - Doc Mgmt - Threaded Discussions - Data and Video Conferencing • “Return to Mars” • Academy of Shared Knowledge 	“Inside NASA” Portal Global Nomadic Access Employee Self Services <ul style="list-style-type: none"> • Benefits • Travel • Directory SOLAR Plus	“My NASA” Portal “My Spacelink” Webcast Services <ul style="list-style-type: none"> • Content Delivery • Training Vehicle On Demand Video Strategic Partnerships (ILN, NSTA SciLINKS)

<u>•SERVICE</u>	<u>•CURRENT STATE</u>	<u>•eNASA OPPORTUNITY</u>	<u>•INFRASTRUCTURE REQUIREMENTS</u>
•Phone			
• Local	•Mature	•Voice over IP	•WAN / LAN bandwidth, QOS
• Long Distance	•Mature		
• Voice Teleconferencing	•NISN VoTS service		
•Desktop			
• Calendaring	•Multiple COTS products	•Agencywide standard	•Directory storage and access
•Word processing, spreadsheet, presentation	•Mature	•Mobile desktop	•Windows 2000, active directory, security
• File sharing and transfer	•No Agencywide capability	•Investigate & make/buy	•WAN / LAN bandwidth, DEN
• Admin tools	•NACC legacy, IFMP	•Enhanced tools (CISCO)	
• Time/attendance	development •NACC legacy, IFMP		
• Travel	development		
• Training	•Adminstar	•Streaming video, webcast	•WAN / LAN bandwidth, QOS
• Forms	•Agencywide standard	•Electronic routing & Digital signature	•PKI, Directory
• Collaborative tools			•WAN / LAN bandwidth,
• Collaborative design	•ISE development		Desktop
• Doc generation and review / approval	•No Agencywide capability	•Investigate & make/buy	•Authentication and authorization via PKI
• Action tracking	•No Agencywide capability	•Investigate & make/buy	•PKI
• Project management	•Agencywide standard		
• Videoconferencing	•NISN ViTS service, CEE rooms	•Desktop videoconferencing	•WAN / LAN bandwidth, QOS
• Printing	•Mature		
• File storage	•No Agencywide capability	•Investigate & make/buy	•Data warehouse, WAN / LAN
• Email	•Mature, secure email in work		
• Internet access	•Mature	•portal	•Web servers, WAN / LAN bandwidth

***“Enhance mission success through seamless, community-focused
electronic service delivery”***

Leadership....Governance.....Competencies.....Technology Management

- NASA’s “Net Readiness” posture to deliver customer focused value-add services requires:
 - Create a leadership environment that fosters desired cultural change
 - Implement the right governance process for achieving success
 - Strategically invest in critical infrastructure and competencies
 - Optimize a shared services model for delivering corporate excellence



Technology Management:

- What is the right IT services model for NASA?
- How do we maximize quality of service within current cost constraints?
- What standards should be imposed and how will they be enforced?
- What is the optimum IT sourcing strategy to meet business needs?

Service Model Option Examples:

1. Agency-wide service provision, with centralized payment
2. Agency -wide service provision on with allocation of costs by use
3. Agency -wide contract vehicle with local purchasing and management
4. Business Unit-wide service provision with center-wide payment
5. Business Unit -wide service provision with allocation of costs by use
6. Business Unit -wide contract vehicles with local purchasing and management
7. Independent local procurement and management
8. Other sourcing strategies

Value Add Service	1	2	3	4	5	6	7	8
Portal and Web Services								
Collaboration Services								
Document Management Services								
Data and Video Services								
eMail and Correspondence Services								
Knowledge Capture Services								
Quality of Service Management								

 Today
 Likely range

Backup Charts

eNASA Approach

- Establish Agencywide eNASA Team
- Develop eNASA Strategy and Roadmap
 - eNASA Framework and Vision
 - Assessment of Current State
 - Benchmark Government and Industry Practices
 - Opportunities for Improvement
 - Strategy and Roadmap for:
 - Leadership, Governance, Competencies, Technology Management
 - Focus Areas and Priorities (Near and Long-Term)
 - Investment Strategies and Timelines
- Interdisciplinary Team Approach
 - Main team members supported by other established Agency teams
 - Work accomplished via weekly telecons, face to face team meetings, and use of a web-based collaborative tool
 - Support by Cisco, Gartner, and Booz Allen

eNASA Team

HQ/AO, Andrea Norris (Team Lead)

- | | | |
|--------------------------|----------------------|-------------------------|
| – HQ/AO, Nancy Kaplan | – ARC/Bob Brummett | – MSFC/Robert McBrayer |
| – HQ/AS, Meg Tuma | – GRC/Steve Prahst | – MSFC/Sheila Cloud |
| – HQ/B, Rosemary Gregory | – GSFC/Paul Hunter | – MSFC/Terry Luttrell |
| – HQ/B, Richard Brozen | – GSFC/Emma Antunes | – JSC/Vicki Pendergrass |
| – HQ/F, Joe McElwee | – GSFC/Richard Day | – KSC/Vanessa Stromer |
| – HQ/F, Shelly Canright | – GSFC/Al Gallo | – SSC/Gay Irby |
| – HQ/H, Ken Stepka | – LaRC/Manjula Ambur | – JPL/Jeanne Holm |
| – HQ/J, Ali Montasser | – LaRC/JoAnne Rocker | – JPL/Jayne Dutra |
| – HQ/M, Chris Burroughs | – LaRC/Doug Craig | |
| – HQ/P, Brian Dunbar | | |

eNASA Events

Dec 12-13	Cisco Benchmarking Trip/Team Kick-Off
Jan 9-11	eNASA Team Kick-Off
March 1-2	eNASA Workshop 2
March 20	SAP Seminar
March 21-23	eNASA Workshop 3 Savoy Suites
April 17-19	eNASA Workshop 4 TBD, DC area
May 16-18	eNASA Workshop 5 TBD, DC area
June date TBD	eNASA Workshop 6 TBD, DC area

Workshop 1: January 9-11, 2001

- Overview of eGov (External)
- Quick Current State Review/Top Level Opportunities
 - Buy Side: E-commerce
 - Sell Side: Citizen Service
 - Inside: Transforming Capabilities and Corporate Services
 - IT Infrastructure
 - Net Readiness Areas
- CISCO Facilitated Visioning Workshop
- Evolution of eNASA Framework
 - Focus on “Customer-Focused, Electronic Service Delivery to Enable Mission Success”
 - 4 Pillar Communities: Partners & Suppliers, Public, Virtual Teams, Employees
 - Enabling Service and Infrastructure
 - Leadership, Governance, Competencies and Technology Management as Critical Agency Success Elements

Workshop 2: March 1-2, 2001

- eNASA Awareness and Communication with Senior Management
 - Goldin Discussion
 - EAAs and Senior Management
 - NASA Performance Plan
 - Other Key Groups: EMC, PMCWG, PPM Focus Groups, APPL
- Refinement of Near and Longer Term Opportunities
- Identification of Who eNASA Team Will Work With
 - Community Representatives
 - “Best in Class” Candidates
- Approaches for Gathering Information
 - Focus Groups, Interviews, Site Visits, Surveys
- Next Workshop: March 20-23
 - Tactical Team Workplan and Tools
 - Final Product Outline
 - Corporate Discussions

- **Benefits**
- **Participants on e-NASA Team**
- **History of development**
 - **Working council of CIOs of the Advisory Board**
 - **Visits to Oracle, CISCO etc**
 - **Strategic partnership with CISCO**
 - **BAH/Gartner consulting**
 - **Observations / Findings:**
 - **ERP history in industry prior to Y2K**
 - **Consolidations of functions at Oracle (\$1B), travel, procurement**
 - **Cisco efficiencies (close books daily) yield 5x rev \$/employee over Lucent**
 - **Net readiness survey – Need to pay increased attention to governance (2/3 customer-focused and 1/3 common IT infrastructure); technology management; IT Infrastructure/services model**
- **Framework**
 - **Community-focus (what role desire)**
 - **Functional/Program Offices**
 - **AIA**
 - **Universities**

Opportunities

- **Near-term**
 - **Employee benefits**
 - **“My NASA”, “My spacelink”**
 - **Web services pilots**
 - **Apply for and interoperate NASA PKI with Federal Bridge PKI**
- **Six months**
 - **E-learning tools/partnerships**
 - **Knowledge management efforts including APPL**
 - **E- markets/supply chain**
 - **Project manager tool kits**
 - **Portal study**
- **Six + months**
 - **Functional consolidation options (need underlying IT infrastructure)**
 - **Expanded IT services (collaboration tools, workgroup servies, document services, knowledge capture services)**
 - **New model for IT service/infrastructure governance and management**
 - **Nomatic computing**

Benefits

Under the Strategic Plan objective: Enhance the security, efficiency, and support provided by our information technology resources

Add as a new Annual Performance Goal with indicators as follows:

Annual Performance Goal:

Enhance mission success through seamless, community-focused electronic service delivery by meeting 5 out of 5 performance indicators in this area.

FY 02 Performance Indicators:

- **Develop the eNASA Strategic Plan and Roadmap to deliver value-added electronic services and information to the public, partners, suppliers, key stakeholders, and the internal employees and teams that execute NASA's missions.**
- **Make the NASA Web more accessible, more personalized, and more useful to all of NASA's diverse audiences as demonstrated by increased customer satisfaction from the FY 01 baseline survey results**
- **Increase the scope and level of corporate and shared electronic services.**
- **Support secure sharing of information government-wide by enabling our Public Key Infrastructure to interoperate with the Federal Bridge.**
- **Expand interagency efforts under the Federal Commons Initiative by posting competitive synopses, solicitations, and grants online.**